

Sub A1

What is claimed is:

1. A diaphragm for a speaker comprising:
a diaphragm body made of metal; and
an auxiliary diaphragm made of paper, the auxiliary
diaphragm integrally bonded to a part of the diaphragm body.
2. The diaphragm according to claim 1, wherein the
auxiliary diaphragm is formed to cover only the center portion
of the diaphragm body.
3. The diaphragm according to claim 1, wherein a
plurality of portions recessed toward the center of the diaphragm
body are formed at a plurality of locations along the outer
periphery of the auxiliary diaphragm.
4. The diaphragm according to claim 3, wherein the
plurality of portions recessed is odd in number, and formed
at regular angular intervals along the outer periphery of the
auxiliary diaphragm.
5. The diaphragm according to claim 1, wherein the
outer configuration and the area of the auxiliary diaphragm
are set based on the high limit frequency of the diaphragm to
which the auxiliary diaphragm is bonded.
6. The diaphragm according to claim 1, wherein a
through hole for inserting a connecting cable is formed at a

portion where the diaphragm body and the auxiliary diaphragm are overlapped, whereby a feeder portion of the diaphragm for inserting the connecting cable to connect with the voice coil can be formed of paper of the auxiliary diaphragm.

7. The diaphragm according to claim 1, wherein a cylindrical portion to which a voice coil bobbin of a speaker is connected is integrally formed at the center of the auxiliary diaphragm.

8. The diaphragm according to claim 1, wherein the auxiliary diaphragm is formed by manufacturing of paper.

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